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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/829,280

Applicant(s)

YOSHIDA ET AL.

Examiner

Haresh N. Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-29 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-824)
Paper No(s)/Mail Date 4/22/2004, 12/13/2007, 5/27/2008
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-29 are subject to examination.

Priority

2. Applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) or (f) (please see applicant provided oath), is acknowledged.

Response to Amendment

3. The preliminary amendments filed 5/11/2007 are acknowledged.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The present title, communication device and program and recording medium for the communication device is too broad and is not sufficient for proper classification of the claimed subject matter.

Drawings

5. The figures submitted on the filing date of this application are acknowledged.

Information Disclosure Statement

6. An initialed and dated copy of the applicant's IDS form 1449, is attached to the instant Office action, please see attachments section of the attached form PTO-326 containing paper dates.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 28 and 29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter. The claims 28 and 29 contain program that is not tangibly embodied in a computer storage medium such as memory, etc containing hardware.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueda et al.
2004/0193647 (Hereinafter Ueda).

10. Referring to claim 1, 28, 29, Ueda discloses a communication device (e.g., page 3), a recording medium storing a program .which makes a computer operate as: a plurality of physical layers (e.g., page 3); memory means for storing a communication quality level required by a subject application (e.g., page 3); and physical layer selecting means for selecting among said plurality of physical layers (e.g., page 3), a physical layer currently capable of providing communications in the communication quality level required by the subject application (e.g., page 3), as a physical layer for the subject application to use in communicating (e.g., page 3).

11. Referring to claim 2, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said communication quality level is determined by an effective throughput, a response time, a transmission rate of the physical layer or a receiving radio field intensity (e.g., page 4).

12. Referring to claim 3, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: in the case where none of the physical layers is capable of providing communications in the quality level required by the subject application, said physical layer selecting means informs that to the subject application and requests that the subject application lower the communication quality level (e.g., page 4)

13. Referring to claim 4, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said physical layer selecting means determines a current communication state of each of said plurality of physical layers according to a predetermined priority order set

beforehand from that of the highest priority if it is capable of providing communications in the communication quality level required by the subject application, and selects the physical layer capable of providing communications in the communication quality level if any (e.g., page 5).

14. Referring to claim 5, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said plurality of physical layers include a physical layer for use in communicating via the radio communication path (e.g., page 5).

15. Referring to claim 6, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said plurality of physical layers include a physical layer which communicates via the radio communication path, using a radio frequency band of either 2.4 GHz band or 5 GHz band (e.g., page 4).

16. Referring to claim 7, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein at least one of said plurality of physical layers that communicates via the radio communication path is provided with a plurality of antennas, and when determining a current communication state of each of said plurality of physical layers if it is capable of providing communications in the communication quality level as required by the subject application (e.g., page 5), said physical layer selecting means switches an antenna among said plurality of antennas in order to obtain respective receiving states, and determines the current communication state of each of said plurality of physical layers based on a receiving state (e.g., page 5).

17. Referring to claim 8, Ueda discloses the claimed limitations as rejected above. Ueda also discloses a plurality of physical layers which communicate via the radio communication path, a physical layer, of the plurality of physical layers which communicate via the radio communication path, having a highest radio wave frequency is provided with a mobile antenna that having installation position (e.g., page 5)

18. Referring to claim 9, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said physical layer that communicates via the radio communication path includes a mobile antenna having an adjustable installation position and said communication device further comprising: stoppage instruction means for temporally stopping the operation of selecting the physical layer by said physical layer selecting means while the installation position of the mobile antenna is being adjusted (e.g., page 6).

19. Referring to claim 10, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein said plurality of physical layers include plural physical layers that communicate via a radio communication path, and the priority order of the physical layers that communicate via the radio communication path is ordered from highest to lowest radio field frequency (e.g., page 6)

20. Referring to claim 11, Ueda discloses the claimed limitations as rejected above. Ueda also discloses, wherein: said memory means stores the priority order of said plurality of physical

layers independently for each of a plurality of subject applications (e.g., page 7), and upon selecting a physical layer for the application to use in communicating, said physical layer selecting means reads out the priority order of the application from the memory means and selects the physical layer according to the priority order (e.g., page 7).

21. Referring to claim 12, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein said physical layer selecting means selects a physical layer for the subject application to use in both directions of transmitting and receiving (e.g., page 4).

22. Referring to claim 13, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said physical layer selects the first physical layer for use in transmitting a signal in a transmitting direction or a receiving direction, at least one of said plurality of physical layers that communicate via the radio communication path and are provided with a plurality of antennas, and selects from other physical layers than the first physical layer for use in signal transmission in other direction (e.g., page 5).

23. Referring to claim 14, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said memory means stores a transmission method of either full-duplex transmission or half-duplex transmission to be adopted for each application (e.g., page 6); and in the case where the stored transmission method for the subject application is a full duplex transmission, said physical layer selecting means selects a physical layer for both transmitting and receiving directions to be used for the application (e.g., page 6); while, in the case where the

transmission method stored for the subject application is a half duplex transmission, said physical layer selecting means selects a physical layer for use in transmitting a signal in either a transmitting direction or a receiving direction which is mainly used, and selects from other physical layer than the physical layer for use in transmitting a signal in the mainly used direction, for use in transmitting a signal in the other direction (e.g., page 6).

24. Referring to claim 15, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein said physical layer selecting means is provided with physical layer fixing means which controls said physical layer selecting means to select a predetermined physical layer for the subject application to use in communicating, irrespective of a communication state (e.g., page 6).

25. Referring to claim 16, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein said physical layer fixing means controls said physical layer selecting means to select the predetermined physical layer only when the subject application does not require a band grantee (e.g., page 7).

26. Referring to claim 17, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: in the case where the subject application starts communicating with a second correspondent different from a first correspondent which is a current correspondent of the subject application, said physical layer selecting means selects from said plurality of physical

layers, a physical layer not in use by the subject application, as a physical layer for use in communicating with the second correspondent (e.g., page 7).

27. Referring to claim 18, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the physical layer in use for communicating with the first correspondent to be used in common between the first correspondent and the second correspondent (e.g., page 7).

28. Referring to claim 19, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: in the case where the subject application starts communicating with a second correspondent different from a first correspondent to which the subject application is communicating, said physical layer selecting means selects between the first physical layer in use by the subject application and the second physical layer, the second physical layer to be used by both of said first correspondent and said second correspondent (e.g., page 6).

29. Referring to claim 20, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: wherein: in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the first physical layer to be used by both of the first correspondent and the second correspondent (e.g., page 7).

30. Referring to claim 21, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: communication state presenting means which presents a communication state of each of said plurality of layers (e.g., page 4).

31. Referring to claim 22, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: communication state presenting means which presents a communication state of each of said plurality of layers (e.g., page 4).

32. Referring to claim 23, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: a plurality of subject applications, wherein said communication state presenting means presents whether a communication state of each physical layer is capable of providing communications in the communication quality level required by each application (e.g., page 5).

33. Referring to claim 24, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: wherein: communication state presenting means presents not only the communication state of each of said plurality of physical layers but also the physical layer being selected by said physical layer selecting means (e.g., page 6).

34. Referring to claim 25, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: wherein: communication state presenting means presents said communication state in display together with said subject application (e.g., page 6).

35. Referring to claim 26, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein said communication device is a video receiving device or a video storage device (e.g., page 5).

36. Referring to claim 27, Ueda discloses the claimed limitations as rejected above. Ueda also discloses wherein: said communication device is a video transmitting device (e.g., page 5).

37. Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Sayers et al. 2004/0048613, KatanaMe Inc., (Hereinafter Sayers-KatanaMe-Inc).

38. Referring to claim 1, 28, 29, Sayers-KatanaMe-Inc discloses a communication device (e.g., page 2), a recording medium storing a program which makes a computer operate as: a plurality of physical layers (e.g., page 2); memory means for storing a communication quality level required by a subject application (e.g., page 2); and physical layer selecting means for selecting among said plurality of physical layers (e.g., page 2), a physical layer currently capable of providing communications in the communication quality level required by the subject application (e.g., page 2), as a physical layer for the subject application to use in communicating (e.g., page 2).

39. Referring to claim 2, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said communication quality level is

determined by an effective throughput, a response time, a transmission rate of the physical layer or a receiving radio field intensity (e.g., page 3).

40. Referring to claim 3, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: in the case where none of the physical layers is capable of providing communications in the quality level required by the subject application, said physical layer selecting means informs that to the subject application and requests that the subject application lower the communication quality level (e.g., page 3)

41. Referring to claim 4, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said physical layer selecting means determines a current communication state of each of said plurality of physical layers according to a predetermined priority order set beforehand from that of the highest priority if it is capable of providing communications in the communication quality level required by the subject application, and selects the physical layer capable of providing communications in the communication quality level if any (e.g., page 4).

42. Referring to claim 5, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said plurality of physical layers include a physical layer for use in communicating via the radio communication path (e.g., page 4).

43. Referring to claim 6, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said plurality of physical layers include a physical layer which communicates via the radio communication path, using a radio frequency band of either 2.4 GHz band or 5 GHz band (e.g., page 3).

44. Referring to claim 7, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein at least one of said plurality of physical layers that communicates via the radio communication path is provided with a plurality of antennas, and when determining a current communication state of each of said plurality of physical layers if it is capable of providing communications in the communication quality level as required by the subject application (e.g., page 4), said physical layer selecting means switches an antenna among said plurality of antennas in order to obtain respective receiving states, and determines the current communication state of each of said plurality of physical layers based on a receiving state (e.g., page 4).

45. Referring to claim 8, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses a plurality of physical layers which communicate via the radio communication path, a physical layer, of the plurality of physical layers which communicate via the radio communication path, having a highest radio wave frequency is provided with a mobile antenna that having installation position (e.g., page 4)

46. Referring to claim 9, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said physical layer that communicates via the radio communication path includes a mobile antenna having an adjustable installation position and said communication device further comprising: stoppage instruction means for temporally stopping the operation of selecting the physical layer by said physical layer selecting means while the installation position of the mobile antenna is being adjusted (e.g., page 5).

47. Referring to claim 10, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein said plurality of physical layers include plural physical layers that communicate via a radio communication path, and the priority order of the physical layers that communicate via the radio communication path is ordered from highest to lowest radio field frequency (e.g., page 5)

48. Referring to claim 11, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses, wherein: said memory means stores the priority order of said plurality of physical layers independently for each of a plurality of subject applications (e.g., page 5), and upon selecting a physical layer for the application to use in communicating, said physical layer selecting means reads out the priority order of the application from the memory means and selects the physical layer according to the priority order (e.g., page 5).

49. Referring to claim 12, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein said physical layer selecting means selects a physical layer for the subject application to use in both directions of transmitting and receiving (e.g., page 3).

50. Referring to claim 13, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said physical layer selects the first physical layer for use in transmitting a signal in a transmitting direction or a receiving direction, at least one of said plurality of physical layers that communicate via the radio communication path and are provided with a plurality of antennas, and selects from other physical layers than the first .physical layer for use in signal transmission in other direction (e.g., page 4).

51. Referring to claim 14, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said memory means stores a transmission method of either full-duplex transmission or half-duplex transmission to be adopted for each application (e.g., page 5); and in the case where the stored transmission method for the subject application is a full duplex transmission, said physical layer selecting means selects a physical layer for both transmitting and receiving directions to be used for the application (e.g., page 5); while, in the case where the transmission method stored for the subject application is a half duplex transmission, said physical layer selecting means selects a physical layer for use in transmitting a signal in either a transmitting direction or a receiving direction which is mainly

used, and selects from other physical layer than the physical layer for use in transmitting a signal in the mainly used direction, for use in transmitting a signal in the other direction (e.g., page 5).

52. Referring to claim 15, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein said physical layer selecting means is provided with physical layer fixing means which controls said physical layer selecting means to select a predetermined physical layer for the subjection application to use in communicating, irrespective of a communication state (e.g., page 5).

53. Referring to claim 16, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein said physical layer fixing means controls said physical layer selecting means to select the predetermined physical layer only when the subject application does not require a band grantee (e.g., page 5).

54. Referring to claim 17, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: in the case where the subject application starts communicating with a second correspondent different from a first correspondent which is a current correspondent of the subject application, said physical layer selecting means selects from said plurality of physical layers, a physical layer not in use by the subject application, as a physical layer for use in communicating with the second correspondent (e.g., page 5).

55. Referring to claim 18, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the physical layer in use for communicating with the first correspondent to be used in common between the first correspondent and the second correspondent (e.g., page 5).

56. Referring to claim 19, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: in the case where the subject application starts communicating with a second correspondent different from a first correspondent to which the subject application is communicating, said physical layer selecting means selects between the first physical layer in use by the subject application and the second physical layer, the second physical layer to be used by both of said first correspondent and said second correspondent (e.g., page 5).

57. Referring to claim 20, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: wherein: in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the first physical layer to be used by both of the first correspondent and the second correspondent (e.g., page 5).

58. Referring to claim 21, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: communication state presenting means which presents a communication state of each of said plurality of layers (e.g., page 3).

59. Referring to claim 22, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: communication state presenting means which presents a communication state of each of said plurality of layers (e.g., page 3).

60. Referring to claim 23, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: a plurality of subject applications, wherein said communication state presenting means presents whether a communication state of each physical layer is capable of providing communications in the communication quality level required by each application (e.g., page 4).

61. Referring to claim 24, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: wherein: communication state presenting means presents not only the communication state of each of said plurality of physical layers but also the physical layer being selected by said physical layer selecting means (e.g., page 5).

62. Referring to claim 25, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: wherein: communication state presenting

means presents said communication state in display together with said subject application (e.g., page 5).

63. Referring to claim 26, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein said communication device is a video receiving device or a video storage device (e.g., page 4).

64. Referring to claim 27, Sayers-KatanaMe-Inc discloses the claimed limitations as rejected above. Sayers-KatanaMe-Inc also discloses wherein: said communication device is a video transmitting device (e.g., page 4).

65. Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Schein et al. 2003/0133426 (Hereinafter Schein).

66. Referring to claim 1, 28, 29, Schein discloses a communication device (e.g., page 2), a recording medium storing a program .which makes a computer operate as: a plurality of physical layers (e.g., page 2); memory means for storing a communication quality level required by a subject application (e.g., page 2); and physical layer selecting means for selecting among said plurality of physical layers (e.g., page 2), a physical layer currently capable of providing communications in the communication quality level required by the subject application (e.g., page 2), as a physical layer for the subject application to use in communicating (e.g., page 2).

67. Referring to claim 2, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said communication quality level is determined by an effective throughput, a response time, a transmission rate of the physical layer or a receiving radio field intensity (e.g., page 3).

68. Referring to claim 3, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: in the case where none of the physical layers is capable of providing communications in the quality level required by the subject application, said physical layer selecting means informs that to the subject application and requests that the subject application lower the communication quality level (e.g., page 3)

69. Referring to claim 4, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said physical layer selecting means determines a current communication state of each of said plurality of physical layers according to a predetermined priority order set beforehand from that of the highest priority if it is capable of providing communications in the communication quality level required by the subject application, and selects the physical layer capable of providing communications in the communication quality level if any (e.g., page 9).

70. Referring to claim 5, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said plurality of physical layers include a physical layer for use in communicating via the radio communication path (e.g., page 9).

71. Referring to claim 6, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said plurality of physical layers include a physical layer which communicates via the radio communication path, using a radio frequency band of either 2.4 GHz band or 5 GHz band (e.g., page 3).

72. Referring to claim 7, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein at least one of said plurality of physical layers that communicates via the radio communication path is provided with a plurality of antennas, and when determining a current communication state of each of said plurality of physical layers if it is capable of providing communications in the communication quality level as required by the subject application (e.g., page 9), said physical layer selecting means switches an antenna among said plurality of antennas in order to obtain respective receiving states, and determines the current communication state of each of said plurality of physical layers based on a receiving state (e.g., page 9).

73. Referring to claim 8, Schein discloses the claimed limitations as rejected above. Schein also discloses a plurality of physical layers which communicate via the radio communication path, a physical layer, of the plurality of physical layers which communicate via the radio communication path, having a highest radio wave frequency is provided with a mobile antenna that having installation position (e.g., page 9)

74. Referring to claim 9, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said physical layer that communicates via the radio communication path includes a mobile antenna having an adjustable installation position and said communication device further comprising: stoppage instruction means for temporally stopping the operation of selecting the physical layer by said physical layer selecting means while the installation position of the mobile antenna is being adjusted (e.g., page 10).

75. Referring to claim 10, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein said plurality of physical layers include plural physical layers that communicate via a radio communication path, and the priority order of the physical layers that communicate via the radio communication path is ordered from highest to lowest radio field frequency (e.g., page 10)

76. Referring to claim 11, Schein discloses the claimed limitations as rejected above. Schein also discloses, wherein: said memory means stores the priority order of said plurality of physical layers independently for each of a plurality of subject applications (e.g., page 10), and upon selecting a physical layer for the application to use in communicating, said physical layer selecting means reads out the priority order of the application from the memory means and selects the physical layer according to the priority order (e.g., page 10).

77. Referring to claim 12, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein said physical layer selecting means selects a physical layer for the subject application to use in both directions of transmitting and receiving (e.g., page 3).

78. Referring to claim 13, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said physical layer selects the first physical layer for use in transmitting a signal in a transmitting direction or a receiving direction, at least one of said plurality of physical layers that communicate via the radio communication path and are provided with a plurality of antennas, and selects from other physical layers than the first physical layer for use in signal transmission in other direction (e.g., page 9).

79. Referring to claim 14, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said memory means stores a transmission method of either full-duplex transmission or half-duplex transmission to be adopted for each application (e.g., page 10); and in the case where the stored transmission method for the subject application is a full duplex transmission, said physical layer selecting means selects a physical layer for both transmitting and receiving directions to be used for the application (e.g., page 10); while, in the case where the transmission method stored for the subject application is a half duplex transmission, said physical layer selecting means selects a physical layer for use in transmitting a signal in either a transmitting direction or a receiving direction which is mainly used, and selects from other physical layer than the physical layer for use in transmitting a signal in the mainly used direction, for use in transmitting a signal in the other direction (e.g., page 10).

80. Referring to claim 15, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein said physical layer selecting means is provided with physical layer fixing means which controls said physical layer selecting means to select a predetermined physical layer for the subject application to use in communicating, irrespective of a communication state (e.g., page 10).

81. Referring to claim 16, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein said physical layer fixing means controls said physical layer selecting means to select the predetermined physical layer only when the subject application does not require a band grantee (e.g., page 10).

82. Referring to claim 17, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: in the case where the subject application starts communicating with a second correspondent different from a first correspondent which is a current correspondent of the subject application, said physical layer selecting means selects from said plurality of physical layers, a physical layer not in use by the subject application, as a physical layer for use in communicating with the second correspondent (e.g., page 10).

83. Referring to claim 18, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the

physical layer in use for communicating with the first correspondent to be used in common between the first correspondent and the second correspondent (e.g., page 10).

84. Referring to claim 19, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: in the case where the subject application starts communicating with a second correspondent different from a first correspondent to which the subject application is communicating, said physical layer selecting means selects between the first physical layer in use by the subject application and the second physical layer, the second physical layer to be used by both of said first correspondent and said second correspondent (e.g., page 10).

85. Referring to claim 20, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: wherein: in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the first physical layer to be used by both of the first correspondent and the second correspondent (e.g., page 10).

86. Referring to claim 21, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: communication state presenting means which presents a communication state of each of said plurality of layers (e.g., page 3).

87. Referring to claim 22, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: communication state presenting means which presents a communication state of each of said plurality of layers (e.g., page 3).

88. Referring to claim 23, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: a plurality of subject applications, wherein said communication state presenting means presents whether a communication state of each physical layer is capable of providing communications in the communication quality level required by each application (e.g., page 9).

89. Referring to claim 24, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: wherein: communication state presenting means presents not only the communication state of each of said plurality of physical layers but also the physical layer being selected by said physical layer selecting means (e.g., page 10).

90. Referring to claim 25, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: wherein: communication state presenting means presents said communication state in display together with said subject application (e.g., page 10).

91. Referring to claim 26, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein said communication device is a video receiving device or a video storage device (e.g., page 9).

92. Referring to claim 27, Schein discloses the claimed limitations as rejected above. Schein also discloses wherein: said communication device is a video transmitting device (e.g., page 9).

Conclusion

In order to expedite the prosecution of this case, multiple references are used for the rejections to demonstrate that several references disclose the claimed subject matter of the claims.

Examiner has cited particular columns and line numbers and/or paragraphs and/or sections and/or page numbers in the reference(s) as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety, as potentially teaching, all or part of the claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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/Haresh N. Patel/

Primary Examiner, Art Unit 2154

6/2/08